

## **EMPHATIC: Table-top Hadron Scattering Measurements for Improved Neutrino Flux Predictions**

*Tuesday, August 2, 2022 6:00 PM (20 minutes)*

State-of-the-art predictions of accelerator-based neutrino fluxes have uncertainties ranging from 5-15%, dominated by hadron production uncertainties. The EMPHATIC Collaboration has proposed a unique, compact spectrometer to measure hadron-scattering and hadron-production cross sections that are needed to reduce neutrino flux uncertainties for current and future neutrino experiments to the few-percent level. In this talk I present an overview of the motivation, design and run plan of the experiment, and progress in data collection and analysis.

### **Attendance type**

In-person presentation

**Primary author:** PALEY, Jonathan (Fermilab)

**Presenter:** PALEY, Jonathan (Fermilab)

**Session Classification:** WG2: Neutrino Scattering Physics

**Track Classification:** WG2: Neutrino Scattering Physics